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14. ABSTRACT Purpose: Cross-sectional exploration of active duty U.S. Navy women's experience with abnormal CCS and navigation of colposcopic follow-up care at a military healthcare facility. Design: Potential participants were women requiring colposcopic follow-up for abnormal cervical cancer screening. Exclusion criteria included a positive pregnancy test or anticipated change of duty station/deployment within three months. Audio-recorded semi-structured interviews, demographic forms, and retrospective mapping were completed. Methods: This descriptive, cross-sectional exploratory study utilized two narrative analysis models: Labov's sociolinguistic and Braun and Clarke's thematic analysis. Demographic and medical record data were collected for descriptive data. Sample: The research data consisted of 26 in-depth, semi-structured interviews conducted in a large, northeastern, military treatment facility after the patient had received recommended colposcopic follow-up care. Analysis: Interviews and field notes were coded and analyzed systematically using inductive techniques, assisted by qualitative software. Demographic data and medical record review (retrospective mapping) were entered into SPSS for statistical analysis. Findings: Abnormal CCS notification process varied widely between ship and shore-based Navy women. Five interconnected themes were identified that represented distinct phases of women's abnormal CCS and colposcopic experience, which provided insight on challenges and experiences military women encounter in the healthcare system: <i>It's like a bomb, I didn't understand, Freaked, It's kind of like this back and forth, and It really opened my eyes.</i> Women described fear, anxiety, and concern following notification of their abnormal CCS results. A number of women turned to the Internet, family, friends, co-workers, and other healthcare providers for support and to better understand findings. Implications for Military Nursing: Military nursing should ensure greater privacy to discuss gender-specific medical and personal issues, timely notification of results, identify/remove barriers to scheduling follow-up appointments, consistent information on abnormal finding significance, educational materials delivery during initial screening, and improve women's healthcare staff knowledge.					
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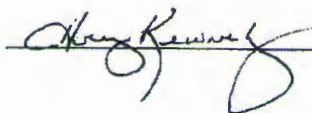
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Date

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Date

7/15/2015

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Abstract

Purpose: Cross-sectional exploration of active duty U.S. Navy women's experience with abnormal CCS and navigation of colposcopic follow-up care at a military healthcare facility.

Design: Potential participants were women requiring colposcopic follow-up for abnormal cervical cancer screening. Exclusion criteria included a positive pregnancy test or anticipated change of duty station/deployment within three months. Audio-recorded semi-structured interviews, demographic forms, and retrospective mapping were completed.

Methods: This descriptive, cross-sectional exploratory study utilized two narrative analysis models: Labov's sociolinguistic and Braun and Clarke's thematic analysis. Demographic and medical record data were collected for descriptive data.

Sample: The research data consisted of 26 in-depth, semi-structured interviews conducted in a large, northeastern, military treatment facility after the patient had received recommended colposcopic follow-up care.

Analysis: Interviews and field notes were coded and analyzed systematically using inductive techniques, assisted by qualitative software. Demographic data and medical record review (retrospective mapping) were entered into SPSS for statistical analysis.

Findings: Abnormal CCS notification process varied widely between ship and shore-based Navy women. Five interconnected themes were identified that represented distinct phases of women's abnormal CCS and colposcopic experience, which provided insight on challenges and experiences military women encounter in the healthcare system: *It's like a bomb, I didn't understand, Freaked, It's kind of like this back and forth, and It really opened my eyes.* Women described fear, anxiety, and concern following notification of their abnormal CCS results. A number of women turned to the Internet, family, friends, co-workers, and other healthcare providers for support and to better understand findings.

Implications for Military Nursing: Military nursing should ensure greater privacy to discuss gender-specific medical and personal issues, timely notification of results, identify/remove barriers to scheduling follow-up appointments, consistent information on abnormal finding significance, educational materials delivery during initial screening, and improve women's healthcare staff knowledge.

TSNRP Research Priorities that Study or Project Addresses**Primary Priority**

Force Health Protection:	<input checked="" type="checkbox"/> Fit and ready force <input checked="" type="checkbox"/> Deploy with and care for the warrior <input checked="" type="checkbox"/> Care for all entrusted to our care
Nursing Competencies and Practice:	<input checked="" type="checkbox"/> Patient outcomes <input checked="" type="checkbox"/> Quality and safety <input type="checkbox"/> Translate research into practice/evidence-based practice <input checked="" type="checkbox"/> Clinical excellence <input type="checkbox"/> Knowledge management <input type="checkbox"/> Education and training
Leadership, Ethics, and Mentoring:	<input type="checkbox"/> Health policy <input type="checkbox"/> Recruitment and retention <input type="checkbox"/> Preparing tomorrow's leaders <input type="checkbox"/> Care of the caregiver
Other:	<input type="checkbox"/>

Secondary Priority

Force Health Protection:	<input type="checkbox"/> Fit and ready force <input type="checkbox"/> Deploy with and care for the warrior <input type="checkbox"/> Care for all entrusted to our care
Nursing Competencies and Practice:	<input type="checkbox"/> Patient outcomes <input type="checkbox"/> Quality and safety <input type="checkbox"/> Translate research into practice/evidence-based practice <input type="checkbox"/> Clinical excellence <input type="checkbox"/> Knowledge management <input checked="" type="checkbox"/> Education and training
Leadership, Ethics, and Mentoring:	<input checked="" type="checkbox"/> Health policy <input type="checkbox"/> Recruitment and retention <input type="checkbox"/> Preparing tomorrow's leaders <input type="checkbox"/> Care of the caregiver
Other:	<input type="checkbox"/>

Progress Towards Achievement of Specific Aims of the Study or Project

Specific aim 1: Describe women's experience and follow up when confronted with a first time diagnosis of an abnormal cervical cancer screening within the military healthcare System (MHS).

This final report reflects completion of participant recruitment, data collection, and data analysis that occurred 17 April through 09 February 2015. An initial recruitment of 20-40 participants was estimated to achieve saturation in this qualitative study examining the experience of active duty U.S. Navy women when confronted with a first time abnormal cervical cancer screening (CCS) requiring a colposcopic procedure. Participants were approached at two military treatment facility colposcopy clinics at the time of their colposcopic procedure. Providers were given information on the study's inclusion and exclusion criteria and provided a brochure describing the study. Potential participants were advised that the PI was available following the procedure if they would like to participate or her contact information if they would like to set up a separate time for the interview. The clinic department head provided a separate private office to interview interested participants.

Twenty-nine women were approached about the study, one declined, two were unable to be reached following the colposcopic procedure and twenty-six agreed to participate in the interview following their procedure.

The audio-recordings were transcribed verbatim and the interviews were entered into a qualitative software program, Atlas.ti, to identify themes within and across the telling of their experiences. The PI began interview coding of and worked closely with her mentor, Dr. Holly Kennedy. Memos were constructed to document study progress and insure an accurate audit trail.

Findings related to specific aim 1: One preliminary finding demonstrated women were still unsure about what their future colposcopic diagnosis at the time of the interview. Retrospectively this may influence their perception of their experience.

The interviews elicited rich, robust information regarding the participant's experiences for successful development of insightful findings. At the time of this annual report, all interviews were coded. Five interconnected themes were identified in the analysis. These themes provided insight on the overall challenges and experiences that women encounter in the military healthcare system and were: 1) "It's like this bombshell"--- the initial notification process of the abnormal cervical cancer screening (CCS) results; 2) "Freaked"--- the emotional toll of receiving an abnormal CCS; 3) "I didn't understand"--- self-discovery to make sense of the abnormal findings; 4) "It's kind of like this back and forth"--- the process of scheduling and navigating care in the military healthcare system; and 5) "It really opened my eyes"---lessons learned from the experience, including the importance of preventive screenings. and five major themes emerged from the data.

Relationship of current findings to previous findings: No previous studies examined military women's experience with colposcopic follow-up care experiences in the military healthcare system.

Effect of problems or obstacles on the results: The PI interviewed a balanced sample of both ship and shore-based women to get a broader understanding of their experiences and how it may differ from where the individuals receive their primary care. Due to changes in CCS and colposcopic guidelines the number of women requiring the procedure declined, which has resulted in less individuals scheduled for the colposcopic procedure for abnormal findings and less potential participants for the study.

Interviews were audio-recorded and field notes used to supplement the experience. The PI conducted the first interviews utilizing a draft questionnaire, which often elicited close-ended questions. Prompts and cues were utilized to encourage participants to provide a more robust telling of their experience from the time of the initial CCS screening through the women's experience upon notification of the abnormal results, and their feelings on the interval between the initial notification and the time waiting for the colposcopy appointment.

Limitations: The design was developed to provide an integrative approach to exploring the individual experience as well as the sample overall experience. Limitations included lack of medical record documentation, particularly for ship-based assets utilizing paper-based medical records. This sample was of women from one branch of the military, which may not be generalizable to other military populations as healthcare delivery services vary between services (deployment issues and care in remote areas). Additionally, there were a number of "no-shows" for scheduled procedures. Individuals that are unsuccessful to schedule follow-up care or fail to attend appointments may have dissimilar experiences that may have added to the overall results.

Conclusion: The overall objectives of specific aim 1 in exploring the experiences of U.S. active duty Navy women receiving a colposcopic procedure and navigating care in the military healthcare system were achieved except for the limitations of women that failed to attend recommended care. Although not generalizable to other military populations the interviews, express concerns raised by military women (particularly for gender-specific healthcare), balancing work, family, military duties, and continuity of healthcare due to deployments and change of duty stations with timely follow-up care for abnormalities. The same barriers and facilitators to follow-up colposcopic care may also be experienced for other health issues, such as hypertension control and should be examined. Evaluation of military healthcare provider's women's healthcare knowledge and comfort in delivering this care is necessary to ensure appropriate notification of abnormal results and ensure timely follow-up care.

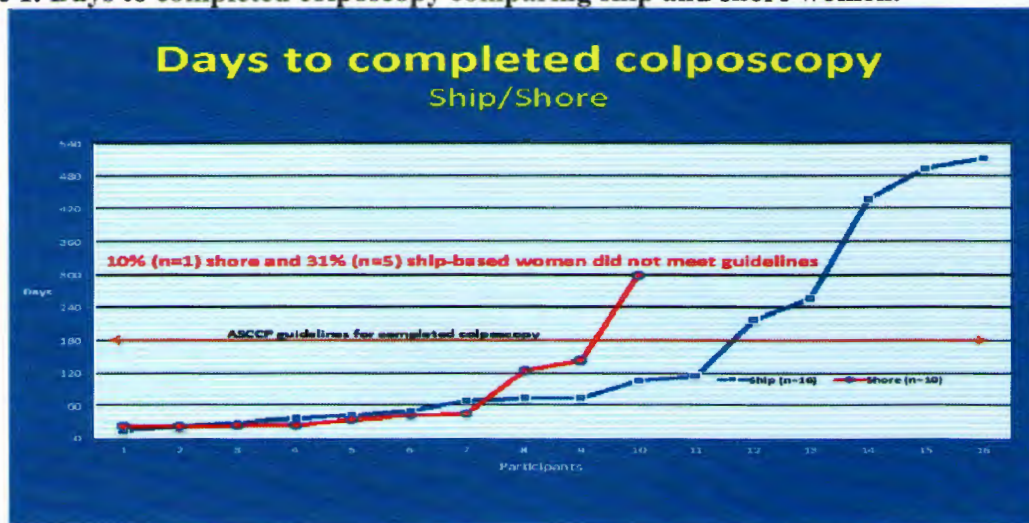
Specific aim 2: Identify challenges and facilitators that women encounter in accessing follow-up care for an abnormal CCS within the MHS.

The interviews included questions asking the participants about system challenges and barriers with regard to timely notification of results, access to schedule appointments, and service-related issues, such as deployments and military exercises that may act as challenges and/or facilitators to accessing follow-up care. Individuals were also asked about the CCS date and the timeframe for scheduling and completing colposcopic procedure. The paper record (if available) and electronic health record (EHR) were also reviewed to identify the date the CCS was performed and the days from the collection of the CCS sample to the date of the colposcopic procedure.

Findings related to specific aim 2: The numbers of days between the two points of care were recorded as a variable in SPSS and included as a descriptive statistic in the findings. The data indicates a range from 14-510 days. There are no strict guidelines for follow-up for recommended colposcopic care. In general, the American Society for Colposcopy and Cervical Pathology recommended that performance of the procedure should take place within six months of the abnormal CCS finding.¹ The Navy Manual of Medicine indicates all individuals will be notified of their CCS within 30 days and abnormal results should be relayed immediately.²

The inability for ships to record health care delivered onboard directly into the participant's EHR is challenging when attempting to get a full picture of the care delivered and notification of abnormal results like CCSs. Most shore commands are required to utilize the EHR. A review of the EHR demonstrated inconsistent provider documentation of abnormal CCS result notification. Figure 1 compares ship and shore-based women and days from initial CCS and completed colposcopic procedure.

Figure 1. Days to completed colposcopy comparing ship and shore women.



Throughout the interviews one of the major facilitators shared by the participants is working in the medical field with direct access to the clinic and staff to arrange timely follow-up care. Four individuals identified themselves as medical personnel. Their date range from CCS to completed

colposcopic procedure ranged from 14-35 days with a mean of 23 days, which is significantly lower than the mean of 94.05 days noted for the entire sample of participants. Interviews demonstrate that participants with the lowest days from CCS to colposcopic procedure were located at a duty station where the medical provider had direct access to the colposcopy clinic for scheduling appointments. These participants were medical personnel and possessed significant understanding of the abnormal CCS findings, the need for follow-up, and the seriousness with regard to progression of the cervical lesion if left untreated. Their date range from CCS to completed colposcopic procedure ranged from 14-35 days with a mean of 23 days, which is significantly lower than the mean of 94.05 days noted for the entire sample.

The data indicated a statistically significant difference between officers and enlisted in dates from initial cervical cancer screening and completed colposcopic procedure (Table 1).

Days to completed colposcopy Officer/Enlisted					
Rank	n	Minimum	Maximum	Mean	Std. Deviation
Enlisted	19	14	510	155.68	166.366
Officer	7	20	124	51.14	36.885
p=0.017					
68% of Enlisted met ASCCP guidelines					
100% of Officers met ASCCP guidelines					

Table 1. Days to Completed Colposcopy Comparing Officers and Enlisted Women

An additional facilitator to follow-up care also included a newly-hired colposcopic clinic nurse recognizing the issues regarding operational women, deployments, and change of duty station on timely notification of abnormal results and follow-up colposcopic procedure took several steps to identify and notify patients. All CCS testing performed by the military facilities in the area where the study were processed through the main lab at the military hospital. The hospital colposcopic nurse collected a weekly report of the abnormal CCS results processed and took active steps to reach out to the individuals either through the service member's provider, service member's command, telephone call to the service member or certified letter to ensure that they are scheduled for timely follow-up care. She documents these communications in the electronic health record.

Many of the individuals had commented about the contact from the colposcopic clinic nurse and shared their positive experience regarding that contact sharing that she was not only reassuring about the abnormal findings, but also provided instant access for scheduling the procedure. In general, most participants contacted by the colposcopy clinic nurse were scheduled within one week for the procedure. This avoided the delay for the service member going through the Tricare

Appointment line or waiting for their provider to notify the member and enter the consult. The PI has coded the interviews and noted other facilitators that included a supportive command, family members and friends. A number of women after receiving the abnormal CCS findings turned to the Internet for additional information. Often this information was upsetting as it describes the primary cause of an abnormal CCS having an HPV etiology. Information that had not been disclosed to them by the provider. Many of the participants were unaware of the role that HPV has in cervical cancer. A second source of information was family and friends that have previously been through a colposcopic procedure. These personal accounts helped decrease the participant's anxiety and fear with regard to both the abnormal finding, but also the procedure.

Lastly, military-unique challenges related to change of duty stations impacted continuity of care, along with shipboard exercises/deployments effecting timely follow-up. Changes in CCS and colposcopic guidelines are often confusing for both the provider and service member.³ Therefore, a patient lost to follow-up may not be seen for their next CCS (according to the new guidelines) for three years allowing the abnormal cervical lesion to progress if the result is also missed on the annual PHA as was discussed earlier.

Relationship of current findings to previous findings: No previous studies examined military women's experience with colposcopic follow-up care experiences in military healthcare system.

Effect of problems or obstacles on the results: The obstacles related to this aim were lack of documentation in health record and inability of participant's to recall key dates of notification and initial CCS. The medical record colposcopy record helped to inform these discrepancies and provide additional documentation to supplement findings. Participants that had more of delay in notification of results had a difficult time in recalling events related to initial screening and information delivered.

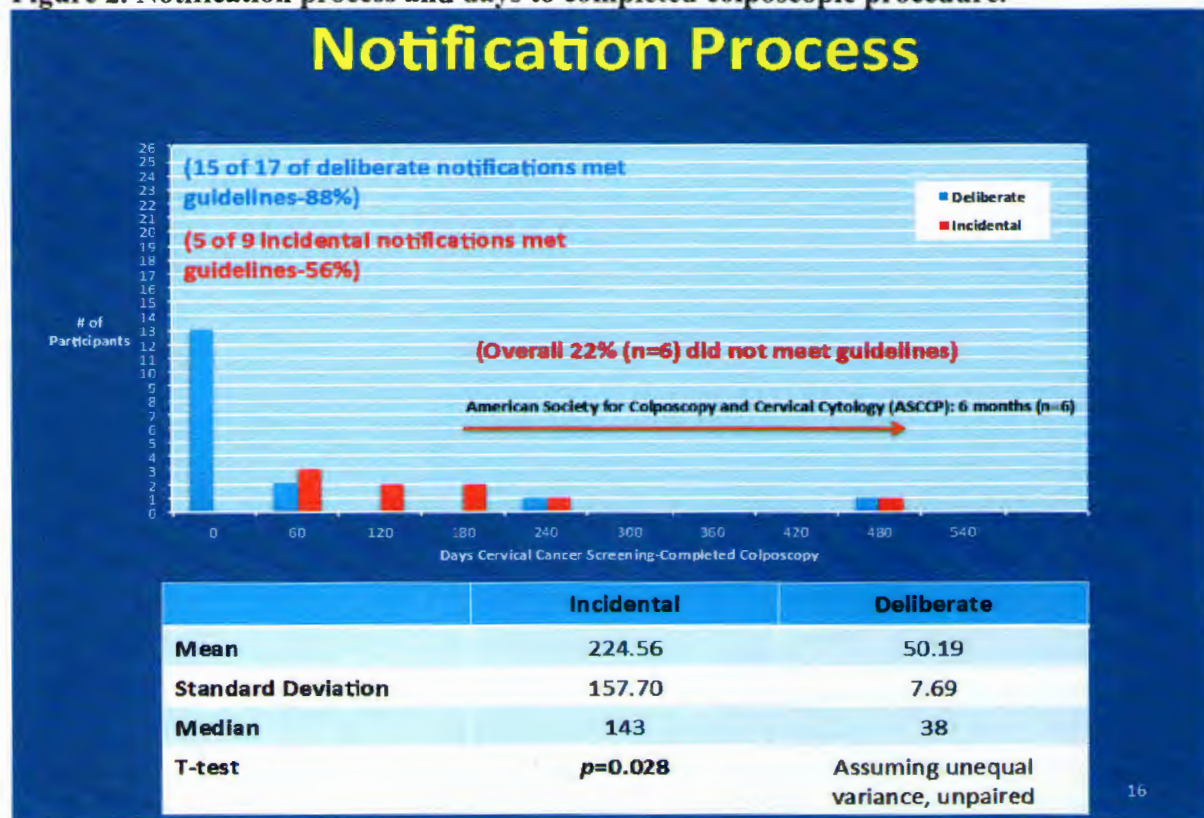
Limitations: The limitations and generalizability of findings described in specific aim 1 also impacted the ability to fully explore the challenges and facilitators for follow-up care for abnormal CCS in an active duty Navy population. Field notes were also useful in understanding colposcopic clinic policies in contacting individuals requiring colposcopic follow-up care, which was seen as a facilitator in notifying individuals of their results and scheduling follow-up care, particularly with individuals describing scheduling issues with the Tricare appointment system and unpredictable shipboard maneuvers, deployments, and change of duty stations.

Conclusion: The overall objectives of specific aim 2 in exploring the challenges and facilitators for follow-up care for abnormal CCS demonstrated that U.S. active duty Navy women, particularly women serving in operational positions, experience significant delays in notification of results and delivery of follow-up care. These delays were alleviated through proactive policies in place in the colposcopy, however, statistically significant differences remain a challenge between officers and enlisted participants in this study.

Specific aim 3: Chart a retrospective map to portray timelines related to notification, reporting, referral, and follow-up care for women with abnormal CCS results in the MHS.

Findings related to specific aim 3: A major finding was the lack of abnormal CCS notification. Participants have described experiences of being notified while attending an appointment unrelated to the initial CCS, which was referred to as an incidental notification. Nine of the twenty-six participants received an incidental notification. The most extreme case of 510 days is complicated even further as the U.S. military requires mandatory annual periodic health assessments (PHA), which includes a review of the health record. It is unclear whether the mandatory PHA was not done as it is not within the electronic health record, however, this may be due to the participant being on a ship with a paper health record and PHA encounter may have been written. There is the possibility that results were overlooked during, especially if medical provider had no access to EHR, that is often the situation for shipboard medical personnel. Figure 2 demonstrates notification type/days to completed colposcopic procedure.

Figure 2. Notification process and days to completed colposcopic procedure.



The in-person notification participants had a lower day average from CCS screening to performance of colposcopic procedure. The process of notification is challenging especially for women serving aboard ships where access to Internet, phone, and mail are limited.

Each of the 26 participants has a secondary record established for the NMCP colposcopy clinic. Once in the system, the colposcopy clinic staff tracks each patient to prevent loss to

deployments, exercises, change of duty stations, and retirement. The difficulty with retrospective mapping was that the majority of shipboard participants did not bring their paper medical record with them, therefore, it was difficult to determine points of care, particularly notification of results as shipboard medical personnel do not use the EHR to document healthcare. The colposcopy consult utilizes a separate ordering system that does not feed into the EHR. Once Tricare schedules an appointment it will show up in the record. The EHR does allow for tracking of cancellations of colposcopic appointments, which is helpful when interviewing the patient regarding delays and barriers in accessing an appointment.

Relationship of current findings to previous findings: No previous studies examined military women's experience with colposcopic follow-up care experiences in the military healthcare system.

Effect of problems or obstacles on the results: Problems and obstacles that limited retrospective mapping were non-documentation of notification of abnormal results and care. Interviews were used to reconstruct the experience, however, inability to recall key dates in the notification process limited results. Three consistent reliable tools in recreating the colposcopic experience events were the colposcopic provider notes, colposcopy shadow record, and laboratory result dates.

Limitations: The use of paper health records not readily available for review was a noted limitation in this study. This limitation was compounded by non-available access to electronic laboratory results, military consult system, and lack of access to the Tricare medical appointment line.

An overall limitation of this study was location of research-This dissertation research was conducted outside the primary academic geographic location. Collaboration with academic advisor/dissertation chair created some challenges with regard to feedback, however, this was overcome by the use of Skype, computer screen sharing, and merging of Atlas project/ codes. This proved successful at overcoming the challenge of distance for collaborative discussion and feedback.

Decrease in the availability of the number of participants secondary to changes in the 2013 CCS and colposcopy guidelines. The three month timeline for data collection was extended to successfully recruit a robust sample of 26 participants (16 ship-based and 10 shore-based).

Conclusion: The retrospective mapping process provided a significant overview of the delays in notification that fell outside ASCCP and Navy Manual of Medicine guidelines for completion of recommended colposcopic care. The type of notification had demonstrated delays in scheduling follow-up care. These delays were often related to operational obligations, which led to delays delayed timely recommended follow-up care. The type of notification (incidental, non-incidental) had direct impact on timeliness of follow-up care.

Significance of Study or Project Results to Military Nursing Military Nursing Clinical

Practice: As outlined in *Healthy People 2020*, access to and compliance with preventive health screenings are instrumental in decreasing disease progression, morbidity and mortality rates.⁴ Military healthcare mandates these screenings to achieve a “fit and ready” force.⁵ Military preventive screening practices, which include cervical cancer screening (CCS), are delineated in each of the armed forces’ *Manuals of Medicine* and mirror general population guidelines.^{1,2,6} Screenings may indicate need for additional diagnostic testing and care that can be problematic in light of military work obligations not encountered in general population. Military deployments, change in duty stations, transfer from active military service, and personal factors may impact adherence to recommended follow-up care guidelines.⁷⁻⁹

Continuity of care can be affected by EHR access and gaps in medical provider education and training.^{7,10,11} The education and experience of military medical personnel varies greatly and may delay referrals.¹² Women represent over 16% of the U.S. active duty forces; however, there is an absence of published literature that addresses their gender-specific healthcare experiences. Improvement in gender-specific healthcare may enhance military operational readiness. Awareness of the continuity of care issues should be addressed by military nurse providers to ensure timely follow-up care and adherence to national and Navy guidelines.

Education: In accordance with 2012 CCS standards in the U.S. Navy Manual of Medicine, many U.S. military recruits entering prior to the age of 21 will likely receive their first CCS after entry into the service at the recommended age of 21.^{2,13} There is evidence to support that military women may have a greater risk for acquiring cervical cancer.¹⁴⁻¹⁸ These risks include: higher rates of smoking, hormonal contraceptive use, unprotected sexual encounters, non-adherence to HPV vaccines, and increased rates of sexually transmitted infections. The screening process is an excellent opportunity for nurses to educate patients on risk factors, preventive screening importance, follow-up for abnormal findings, and self-management of health.

Policy: In the U.S. Navy healthcare system, military women receive care from physicians, nurse practitioners, physician’s assistants, and/or independent duty corpsmen (IDC) (LPN-equivalent) whose duties include informing the women of their abnormal CCS results. An estimated 15% of military and civilian women receiving healthcare in a military clinic are lost to diagnostic evaluation for abnormal CCS, which can delay early treatment.⁸ If left undiagnosed, treatable precancerous cervical lesions may progress to invasive cervical cancer. It is crucial to understand the reasons for lack of follow up in order to develop strategies to assure adherence to recommended care, which can impact military operational readiness.

Concerns were expressed about the medical abilities of shipboard healthcare personnel and healthcare privacy/confidentiality within the ship’s confined spaces where medical personnel were also co-workers. Shipboard women shared that they often sought outside referrals for gender-specific care. Women in the military are often isolated from family and friends, particularly during deployments and often turn to the Internet, which may be unreliable, for additional information to clarify and make meaning of the abnormal healthcare findings.

Some women described their perception of the stigma attached to attending medical appointments during the workday, particularly among ship-based women. Women shared that

co-workers would make them feel guilty about attending medical appointment, suggesting that they were not pulling their weight onboard the ship. This often led to delays in scheduling recommended healthcare appointments. Developing policies that ensure adherence to confidentiality, training of medical personnel in women's health, and timely access to electronic health records may improve the healthcare experience.

Summary of Findings: The findings of this study demonstrated a number of women had delays in notification of abnormal findings, but eventually received the recommended age-specific follow-up care as outlined in the U.S. Navy Manual of Medicine.² Changes in CCS frequency and colposcopic care for abnormal findings have necessitated the need to understand women's motivation to attend preventive screenings and recommended follow-up care. Military women differ greatly from their civilian counterparts on preventive screenings with access to free healthcare and the requirement to have CCS as part of military medical readiness. Understanding their knowledge of CCS and their experiences in receiving abnormal results and follow-up care can provide insight on their beliefs on the importance of preventive screenings.

The findings of this study revealed unique healthcare challenges for military women experiencing abnormal CCS results and the need for follow-up care. There were delays in notification, scheduling difficulties, and avoidance of certain medical department personnel. The women were concerned about the ship's medical capacity (knowledge and experience of medical provider), privacy and confidentiality, and the close working quarters on the ship. These may act as barriers to timely, effective, and sensitive care.

Women described CCS notification experiences, self-discovery process, emotional impact, colposcopic process anticipation, importance of follow-up care, and thoughts about long-term health implications. There were mixed understandings of why CCS is performed, what results indicate, HPV, HPV vaccination knowledge, and risk factors linked to cervical cancers (such as smoking and unprotected sexual encounters). These were similar in other female populations.^{19,20} Failure to understand contributory factors in cervical abnormality progression and abnormal CCS significance may contribute to delays in recommended care, and are significant flaws in healthcare delivery and the educational process for military medical providers and patients.^{21,22}

The women in this study shared their personal journey to make meaning of their results and the subsequent fear that developed after independent information searches. These fears could have been eased by a more thorough explanation of abnormalities during the CCS and the initial notification process. In the military healthcare system, with continuity of care issues related to deployment, change of duty stations and transition from active duty service, notification delays can lead to progression of treatable cervical lesions.

Future research: 1) Explore psycho-educational initiatives to improve women's health, HPV and abnormal CCS knowledge and adherence to recommended guidelines; 2) Investigate tracking systems for timely notification and accurate dissemination of lab results; 3) Explore disparities in timely completion of colposcopic procedures; 4) Examine military provider's experiences, knowledge, and comfort in delivery of female-specific healthcare; and 5) Conduct a retrospective chart analysis in the Veteran's population examining diagnosed cervical cancer cases and active duty CCS to identify issues associated with military gender-specific healthcare.

Changes in Clinical Practice, Leadership, Management, Education, Policy, and/or Military Doctrine that Resulted from Study or Project

Navy military leadership notified of study findings including Directors of Primary Care Clinics, Navy Bureau of Medicine and Surgery, the Navy OB/GYN Specialty Leader, and the process improvement department that is currently tracking notification of critical abnormal findings and follow-up healthcare; however no changes to date have been made.

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Summary of Dissemination

Type of Dissemination	Citation	Date and Source of Approval for Public Release
Publications in Press	Research on Military Women: Recruitment and Retention Challenges and Strategies. Braun, Lisa; Kennedy, Holly; Sadler, Lois; Dixon, Jane, In press- <i>Military Medicine</i> (2015).	6/19/2014- Cynthia Hilsinger Public Affairs/Knowledge Mgmt. Officer
Podium Presentations	<i>Abnormal cervical cancer screenings in a military population: notification & impact on follow-up care.</i> Braun, Lisa; Kennedy, Holly Powell-American Academy of Nurse Practitioners Annual Conference. Presented 6/13/2015, New Orleans, LA.	4/27/2015- Cynthia Hilsinger Public Affairs/Knowledge Mgmt. Officer
	<i>Communication and Understanding: Perceptions of U.S. Navy Women with Abnormal Cervical Cancer Screening and Follow-up Care.</i> Braun, Lisa; Kennedy, Holly; Sadler, Lois. East Coast Nursing Research Society Symposium. Presented 4/9/15, Washington, D.C.	3/6/2015- Cynthia Hilsinger Public Affairs/Knowledge Mgmt. Officer
	<i>Integrated Literature Review: Genitourinary and Reproductive Health Issues of Active Duty U.S. Military Women.</i> Braun, L. and Kennedy, H. Joining Forces to Restore Lives: Nursing Education and Research in Veterans Health Conference. Sponsored by University of South Florida. Presented 10/21/13, Tampa, FL.	10/15/2013- Joshua L. Wick Public Affairs Specialist U.S. Navy Bureau of Medicine and Surgery
Poster Presentations	<i>Ethical and Methodological Challenges in Recruitment of Military Women in Research.</i> Braun, Lisa. TriService Nursing Research Program (TSNRP) Research and Evidence-Based Course. Sponsored by TSNRP. Presented 9/16/2014, San Antonio, TX.	8/21/2014- Cynthia Hilsinger Public Affairs/Knowledge Mgmt. Officer

	<i>Current Cervical Cancer Screening Guidelines: Implication for Military Women & Veterans: An Integrated Literature Review.</i> Braun, Lisa & Kennedy, Holly. American College of Nurse Midwives (ACNM) Conference. Sponsored by ACNM. Presented 5/29/2013, Nashville, TN.	4/1/2013-LCDR D.M. Brent
Abstract	<i>Communication & Understanding: Perceptions of U.S. Navy Women with Abnormal Cervical Cancer Screening & Follow-up Care.</i> Submitted to TriService Nursing Research Program Research and Evidence-Based Course. Sponsored by TSNRP. Submitted for poster presentation in 2015.	4/27/2015- Cynthia Hilsinger Public Affairs/Knowledge Mgmt. Officer
Other	Integrative Literature Review: U.S. Military Women's Genitourinary and Reproductive Health. Braun, Lisa; Kennedy, Holly; Womack, Julie; Wilson, Candy, Submitted to <i>Military Medicine</i> -In review (2015). U.S. Navy Women's Experience of an Abnormal Cervical Cancer Screen. Braun, Lisa; Kennedy, Holly; Sadler, Lois; Dixon, Jane; Womack, Julie; Wilson, Candy- Submitted to <i>Journal of Midwifery and Women's Health</i> -preliminary acceptance for publication (2015).	9/30/2014. Cynthia Hilsinger-Public Affairs/Knowledge Mgmt. Officer 3/9/2015. Cynthia Hilsinger-Public Affairs/Knowledge Mgmt. Officer

Reportable Outcomes

Reportable Outcome	Detailed Description
Applied for Patent	None
Issued a Patent	None
Developed a cell line	None
Developed a tissue or serum repository	None
Developed a data registry	None

Recruitment and Retention Table

Recruitment and Retention Aspect	Number
Subjects Projected in Grant Application	20-40
Subjects Available	29
Subjects Contacted or Reached by Approved Recruitment Method	29
Subjects Screened	29
Subjects Ineligible	0
Subjects Refused/Unavailable	3
Human Subjects Consented	26
Subjects Who Withdrew	0
Subjects Who Completed Study	26
Subjects With Complete Data	23
Subjects with Incomplete Data	3

Demographic Characteristics of the Sample

Characteristic

Age (yrs)	26.31±5.54
Women, n (%)	26 (100)
Race	
White, n (%)	16 (62)
Black, n (%)	5 (19)
Hispanic or Latino, n (%)	2 (8)
Asian or Pacific Islander, n (%)	3 (12)
Other, n (%)	0 (0)
Military Service or Civilian	
Air Force, n (%)	0 (0)
Army, n (%)	0 (0)
Marine, n (%)	0 (0)
Navy, n (%)	26 (100)
Civilian, n (%)	0 (0)
Service Component	
Active Duty, n (%)	26 (100)
Reserve, n (%)	0 (0)
National Guard, n (%)	0 (0)
Retired Military, n (%)	0 (0)
Prior Military but not Retired, n (%)	0 (0)
Military Dependent, n (%)	0 (0)
Civilian, n (%)	0 (0)
Education	
Less than high school	1 (4)
High school	6 (23)
Some college	8 (31)
College completed	8 (31)
Graduate school	1 (4)
Missing values	2 (8)

*Rounding errors

Family status

Single	12 (46)
Married	10 (38)
Divorce/Separated/Other	4 (15)

Military rank

Enlisted grades 1-4	10 (38)
Enlisted grades 5 or >	8 (31)
Commissioned/Warrant Officers	6 (23)
Missing values	2 (8)

Years of service

1-4	16 (62)
5-9	7 (27)
10-20	1 (4)
≥ 20	2 (8)

*Rounding errors

Final Budget Report

The final financial status report is included. This award was originally supposed to end on February 29, 2016. However, Dr. Braun graduated in May 2015 and the award closed as of June 30, 2015, with a remaining balance of \$10,774 (\$6,471 direct; \$4,303 indirect).

Yale University
GC Financial Status Report

Date: July 2, 2015
 Time: 12:37:51 PM

YSNACA EDD Administration**Actuals Through: June 2015****Award PI: Braun, Lisa Anne**

Award Owning Org: YSNACA Research Support

Award Number: Q00531

Award Owning Org Number: 790018

Award Description : Cervical Cancer Screening

Sponsor Reference: HU0001-14-1-TS01 N14-002

Sponsor: Triservice Nursing Research Program

IDC Schedule: GC-MTDC-66% TO 66.5%

OGM Award Funded Amount		Award Start Date		Award End Date		Actual Balance		For Commitment Review Purposes Only			
		40,751.00		01-Mar-14		29-Feb-16		10,774.46		Automatic Labor Commitments	Custom Commitments
Expenditure Type		Advances	Expenses to Date	Adjustments	Adjusted Total						
MR8200	Materials and Supplies	0.00	1,746.48				0.00	0.00	0.00		
MR8300	Service Expenses	0.00	2,295.78				0.00	0.00	0.00		
MR8700	Travel & Business Expenses	0.00	12,283.21				0.00	0.00	0.00		
MR8800	Equipment & Furnishings	0.00	2,237.15				0.00	0.00	0.00		
MR8900	Dues/Fees	0.00	20.00				0.00	0.00	0.00		
MR9640	Facility & Administrative Charges	0.00	11,393.92				0.00	0.00	0.00		
Award Total:		0.00	29,976.54				0.00	0.00	0.00		

No Cost Extension**Approved** _____

(Provide documentation)

Pending _____

(Provide copy of request)

Note: Financial reports are still required to be filed with sponsor until a formal approval is received.**Certification (by Principal Investigator/Authorized Designee)**

I as PI (or PI authorized designee) certify to the best of my knowledge that all charges reflected by this report 1. benefit the award, 2. are allowable according to University policies, sponsor requirements, and regulations, as appropriate, and 3. are reasonable and allocable to this award.

Lori Pilchik, Financial Analyst

Name & Title

Lori Pilchik

Signature

July 2, 2015

Date

☐ Advances have been cleared. (Check this box if an advance existed on the award and the advance has been cleared. Note that the Award Total does not reflect the advance amount.)